## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. : 10/615,681 Confirmation No. 9816

Applicants : Jung Chung Lai et al.

Filed : July 8, 2003

Title : SOLE CONSTRUCTION

FOR AN ATHLETIC SHOE

TC/A.U. : 1794

Examiner : Walter B. Aughenbaugh

Docket No. : 0EKM-104478

Customer No. : 30764

Date : February 11, 2008

## APPEAL BRIEF

Mail Stop Appeal Brief – Patents Commissioner for Patents Post Office Box 1450 Alexandria, Virginia 22313-1450

Sir:

# (1) REAL PARTY IN INTEREST

The real party in interest in this application is the only assignee, Taylor Made Golf Company, Inc.

# (2) RELATED APPEALS AND INTERFERENCES

Appellants and Appellants' legal representatives know of no related appeals or interferences. Therefore, no appeal or interference known to Appellants or Appellants' legal representatives will directly affect, or be directly affected by, or have a bearing on the Board's decision in the pending appeal.

-- 1 --

## (3) STATUS OF CLAIMS

Claims 1 and 3-17 are pending in the application and have been twice rejected by the Examiner. Claims 2 and 18-25 were canceled. Appellants have appealed the rejection of claims 1 and 3-17.

## (4) STATUS OF AMENDMENTS

Appellants have not filed a amendments to the claims or specification after final rejection. All amendments filed by Appellants have been entered by the Examiner.

## (5) SUMMARY OF CLAIMED SUBJECT MATTER

## Independent Claim 1

Independent claim 1 is directed to an article of footwear including an upper and a sole, wherein the sole has an outsole for directly contacting a ground surface, and further including at least one element compression molded with the outsole. The at least one element is formed from a first material comprising at least 45% ethylene vinyl acetate, approximately 30% polyene elastomer, and approximately 20% synthetic rubber. In addition, the at least one element has the specific performance property of showing no damage during a bending test performed at 23°C W. Prick or at -10°C Prick. The outsole includes a second material that is compatible for compression molding with the at least one element, and is less hard and less dense than the at least one element. Support for this claim is found *inter alia* in paragraphs [0048] of the published specification.

### Independent Claim 11

Independent claim 11 is directed to an article of footwear including an upper and a sole, wherein the sole has an outsole for directly contacting a ground surface, and further including at least one element compression molded with the outsole. The at least one element is formed from a first material comprising at least 45% ethylene vinyl acetate, approximately 30% polyene elastomer, and approximately 20% synthetic rubber. In addition, the at least one element has the specific performance property of showing no damage during a bending test performed at 23°C W. Prick or at -10°C Prick. The article of footwear further includes at least

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one clear receptacle compression molded with the at least one element. The outsole includes a second material that is compatible for compression molding with the at least one element, and is less hard and less dense than the at least one element. The at least one cleat receptacle is accessible for attachment of a non-metal cleat. Support for this claim is found inter alia in paragraphs [0020] and [0048] of the published specification.

#### (6) GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Whether claims 1, 4-7, and 10-15 are unpatentable under 35 U.S.C. § 103(a) over U.S. Patent No. 5,932,336 to Allen (the "Allen patent"), in view of U.S. Patent No. 4,243,576 to Fischer (the "Fischer patent").

Whether claim 3 is unpatentable under 35 U.S.C. § 103(a) over the Allen patent, in view of the Fischer patent, in further view of U.S. Patent No. 5,869,591 to McKay (the "McKay patent").

Whether claims 8, 9, 16, and 17 are unpatentable under 35 U.S.C. § 103(a) over the Allen patent, in view of the Fischer patent, in further view of U.S. Patent No. 5,771,605 to Safdie (the "Safdie patent").

#### (7) ARGUMENT

#### A. The § 103(a) Rejection of Claims 1, 4-7, and 10-15 Based on the Allen Patent in View of the Fischer Patent

As mentioned above, claims 1, 4-7, and 10-15 were rejected under 35 U.S.C. § 103(a), as allegedly obvious over the <u>Allen</u> patent, in view of the Fischer patent.

Claims 1, 4-7, and 10-15, generally define an article of footwear including an upper and a sole, wherein the sole has an outsole for directly contacting a ground surface, and further including at least one element compression molded with the outsole. The at least one element is formed from a first material comprising at least 45% ethylene vinyl acetate, approximately 30% polyene elastomer, and approximately 20% synthetic rubber. In addition, the at least one element has the specific performance property of showing no damage during a bending test performed at 23°C W. Prick or at -10°C Prick. The outsole includes a second

W02-WEST:1DCM1/401247012.1

material that is compatible for compression molding with the second material that is less hard and less dense than the first material.

The Allen patent discloses a golf shoe incorporating a spike socket spine frame system embedded in the outsole and extending throughout the shoe sole, for receiving all of the spike receptacles. The Allen patent teaches and claims (col. 6:9-37, and claim 5) that the spike socket spine be composed of a thermoplastic polyurethane ("TPU") which is preferably stiffened by the addition of 5-30 % of carbon or glass reinforcement fibers. The Allen patent fails to disclose the use of any material comprising ethylene vinyl acetate and certainly does not disclose the use of any material having a composition of at least 45% ethylene vinyl acetate. approximately 30% polyene elastomer, and approximately 20% synthetic rubber, i.e., Applicants' "ESS" blend. Also, Applicants in paragraph 0056 of the published application (2005/0005474 A1) go further and distinguishe the use of a TPU from that of the claimed ESS blend by indicating that substitution of the ESS blend for TPU results in a reduction in sole weight of between 7.75% (i.e., reduction of 10 g from 129 g) and 25% (i.e., reduction of 32.5 g from 129 g). Finally, the Allen patent fails to disclose that the outsole is less dense than the frame; rather, it discloses only that the outsole is "softer" than the frame. Applicants state that the ESS material has a density of 0.84 g/cm<sup>3</sup>. The Examiner argues that because the Allen patent indicates that the frame TPU is harder and provides a "cushioning effect," the spine TPU of Allen must have a lower material density. Applicants maintain that it does not necessarily follow that a softer material must always have a lower material density. In fact, in one embodiment Applicants' ESS blend has a material density of 0.94 g/cm<sup>3</sup> (col. 3:1 of Applicants published application), whereas most TPU's have densities greater than 1, and according to the manufacturers specification, the preferred TPU used as the spine material by Allen, Isoplast 101 from Dow Chemical (col. 6:33-36) has a density of 1.19 g/cm<sup>3</sup>.

The Fischer patent fails to make up for these deficiencies of the Allen patent. The Fischer patent simply discloses a method of improving the Money viscosity and green strength of a specific EVA gum stock having between 40 to 70 wt % vinyl acetate by the addition of a 10-40 of another elastomer. However, Applicants note that the Fischer patent fails to disclose the use of any material having a composition of at least 45% ethylene vinyl acetate, approximately 30% polyene elastomer, and approximately 20% synthetic rubber. The Examiner cites col. 2, line 22

W02-WEST:1DCM13401247012.1

-- 4 --021109 0EKM-104478 through col. 3, line 8, for the proposition that <u>Fischer</u> discloses the use of two elastomers. However, the cited paragraphs only disclose the use of one elastomer, which may also be prepared with additional monomers such as for instance to render it a terpolymer rather than a copolymer. Nowhere does <u>Fischer</u> describe Applicants' three component ESS blend and certainly not the claimed specific relative ranges of each blend component. Finally, <u>Fischer</u> does not disclose the use of the blended EVA materials as a surrounding layer of a golf shoe cleat receptacle in a compression molded golf shoe outsole but rather only discloses uses such as adhesive formulation and PVC impact modifiers and various automotive applications.

For these reasons, the obviousness rejection of claims 1, 4-7, and 10-15 is improper and should be withdrawn.

# B. The § 103(a) Rejection of Claim 3 Based on the <u>Allen</u> Patent in View of the Fischer and McKay Patents

As mentioned above, dependent claim 3 was rejected under 35 U.S.C. § 103(a), as allegedly obvious over the <u>Allen</u> patent, in view of the <u>Fischer</u> patent, in further view of the <u>McKay</u> patent.

Claim 3 depends from independent claim 1. Applicants incorporate the arguments made above regarding the <u>Allen</u> and <u>Fischer</u> patents. The deficiencies of these patents are not remedied by the <u>McKay</u> patent, which fails to disclose or even suggest Applicants' specific combination of at least 45% ethylene vinyl acetate, approximately 30% polyene elastomer, and approximately 20% synthetic rubber.

For these reasons, the obviousness rejection of dependent claim 3 is improper and should be withdrawn.

## C. The § 103(a) Rejection of Claims 8, 9, 16, and 17 Based on the <u>Allen</u> Patent in View of the <u>Fisher</u> and <u>Safdie</u> Patents

As mentioned above, claims 8, 9, 16, and 17 were rejected under 35 U.S.C. § 103(a), as allegedly obvious over the <u>Allen</u> patent in view of the <u>Fuller</u> patent, and in further view of the <u>Safdie</u> patent.

-- 5 --

Claims 8 and 9 depend from independent claim 1, and claims 16 and 17 depend from independent claim 11. Applicants incorporate the arguments made above regarding the Allen and Fischer patents. The deficiencies of these patents are not remedied by the Safdie patent, which fails to disclose or even suggest Applicants' specific combination of at least 45% ethylene vinyl acetate, approximately 30% polyene elastomer, and approximately 20% synthetic rubber.

For these reasons, the obviousness rejection of claims 8, 9, 16, and 17 is improper and should be withdrawn

#### D. Conclusion

For the reasons set forth above, the rejections of the claims are improper and should be reversed. A decision directing the Examiner to issue a Notice of Allowance is respectfully requested.

Respectfully submitted,

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-- 6 --021109 0EKM-104478

## (8) CLAIMS APPENDIX

Claim 1: An article of footwear, comprising:

an upper and a sole, wherein the sole has an outsole for directly contacting a ground surface; and

at least one element compression molded with the outsole, wherein the at least one element is formed from a first material comprising at least 45% ethylene vinyl acetate, approximately 30% polyene elastomer, and approximately 20% synthetic rubber, and wherein the at least one element is not damaged during a bending test performed at 23°C W. Prick or at -10°C Prick; and

wherein the outsole includes a second material that is compatible for compression molding with the at least one element and is less hard and less dense than the at least one element.

Claim 3: The article of footwear according to claim 1, wherein the second material of the outsole includes ethylene vinyl acetate with blowing agents.

Claim 4: The article of footwear according to claim 1, wherein the second material of the outsole is selected from a group consisting of rubber, thermoplastic urethane, and ethylene vinyl acetate with blowing agents.

Claim 5: The article of footwear according to claim 1, wherein the outsole comprises two materials selected from a group consisting of rubber, thermoplastic urethane, and ethylene vinyl acetate with blowing agents.

Claim 6: The article of footwear according to claim 1, wherein the at least one element is outwardly visible on the sole.

Claim 7: The article of footwear according to claim 1, wherein the at least one element comprises a plurality of elements and at least one of the plurality of elements is outwardly visible on the sole.

Claim 8: The article of footwear according to claim 1, wherein the at least one element includes a foil layer that is outwardly visible on the sole.

Claim 9 (original). The article of footwear according to claim 1, wherein the at least one element includes an electroplated member that is outwardly visible on the sole.

Claim 10: The article of footwear according to claim 1, wherein the at least one element provides torsional reinforcement for the sole.

## Claim 11: An article of footwear, comprising:

an upper and a sole, wherein the sole has an outsole for directly contacting a ground surface;

at least one element compression molded with the outsole, wherein the at least one element is formed from a first material comprising at least 45% ethylene vinyl acetate, approximately 30% polyene elastomer, and approximately 20% synthetic rubber, and wherein the at least one element is not damaged during a bending test performed at 23°C W. Prick or at -10°C Prick; and

at least one cleat receptacle compression molded with the at least one element;

wherein the outsole includes a second material that is compatible for compression molding with at least one element and that is less hard and less dense than the at least one element, and wherein the at least one cleat receptacle is accessible for attachment of a non-metal cleat

Claim 12: The article of footwear according to claim 11, wherein the material of the outsole is selected from a group consisting of rubber, thermoplastic urethane, and ethylene vinyl acctate with blowing agents.

Claim 13: The article of footwear according to claim 11, wherein the outsole comprises two materials selected from a group consisting of rubber, thermoplastic urethane, and ethylene vinyl acetate with blowing agents.

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Claim 14: The article of footwear according to claim 11, wherein the at least one element comprises a plurality of elements and each element of the plurality of elements includes a cleat receptacle.

Claim 15: The article of footwear according to claim 11, wherein the at least one element comprises a plurality of elements and at least one element of the plurality of elements includes at least one clear receptacle.

Claim 16: The article of footwear according to claim 11, wherein the at least one element includes a foil layer that is visible on the sole.

Claim 17: The article of footwear according to claim 11, wherein the at least one element includes an electroplated member that is visible on the sole.

# (9) EVIDENCE APPENDIX

None.

# (10) RELATED PROCEEDINGS APPENDIX

None.